What we claim is:

1. Isolated nucleic acid molecule, which codes for a protein comprising the amino acid sequence according to SEQ ID NO 1.

2. Nucleic acid molecule according to claim 1, which codes for a protein comprising exclusively the amino acid sequence according to SEQ ID NO 1.

3. Nucleic acid molecule according to one of claims 1 or 2, whereby the nucleic acid molecule is a DNA molecule.

4. Nucleic acid molecule according to claim 3, comprising a base sequence according to SEQ ID NO 2 or a base sequence, which only differs from the sequence according to SEQ ID NO 2 on the basis of the degeneration of the genetic code.

5. Nucleic acid molecule according to claim 3, comprising a base sequence according to SEQ ID NO 3 or a base sequence, which only differs from the sequence according to SEQ ID NO 3 on the basis of the degeneration of the genetic code.

6. Nucleic acid molecule according to claim 3, comprising a base sequence according to SEQ ID NO 4 or a base sequence, which only differs from the sequence according to SEQ ID NO 4 on the basis of the degeneration of the genetic code.

7. Nucleic acid molecule according to claim 3, which has exclusively one base sequence, which is selected from the group of base sequences SEQ ID NO 2, SEQ ID NO 3, SEQ ID NO 4 and a base sequence that only differs from one of the said sequences on the basis of the degeneration of the genetic code.

8. Vector comprising a nucleic acid molecule according to one of claims 1 to 7.

9. Vector according to claim 8, whereby the vector is suitable for transformation of a host cell.

10. Vector according to claim 9, whereby the host cell is a microorganism.

11. Vector according to claim 10, whereby the microorganism is a filamentous fungus.

12. Vector according to claim 11, whereby the filamentous fungus is advantageously selected from the group consisting of *Penicillium chrysogenum, Penicillium notatum, Penicillium brevicompactum, Penicilium citrinum, Acremonium chrysogenum, Aspergillus nidulans, Aspergillus niger, Aspergillus fumigatus, Aspergillus terreus* and *Tolypocladium inflatum*

13. Vector according to claim 12, whereby the filamentous fungus is *Penicillium chrysogenum* .

14. Host cell which is transformed with a nucleic acid molecule according to one of claims 1 to 7 or with a vector according to one of claims 8 to 13.

15. Host cell according to claim 14, whereby the host cell is a microorganism.

16. Host cell according to claim 15, whereby the microorganism is a filamentous fungus.

17. Host cell according to claim 16, whereby the filamentous fungus is advantageously selected from the group consisting of *Penicillium chrysogenum, Penicillium notatum, Penicillium brevicompactum, Penicilium citrinum, Acremonium chrysogenum, Aspergillus nidulans, Aspergillus niger, Aspergillus fumigatus, Aspergillus terreus* and *Tolypocladium inflatum*

18. Host cell according to claim 17, whereby the filamentous fungus is *Penicillium chrysogenum* .

19. Process for the production of penicillin, comprising the cultivation of a host cell according to claim 18 under conditions that are suitable for the formation of penicillin with the host cell.

20. Process according to claim 19, whereby the penicillin is penicillin G or penicillin V.

21. Process according to one of claims 19 or 20, further comprising the isolation of the penicillin formed.

22. Isolated protein, comprising an amino acid sequence according to SEQ ID NO 1.

23. Protein according to claim 22, whereby the protein has exclusively the amino acid sequence according to SEQ ID NO 1.